

WHAT IS CLAIMED IS:

1. A reticle for use in a lithographic process, comprising:
2 a patterned layer located over a reticle substrate; and
3 a test pattern located over said reticle substrate, wherein a
4 portion of said test pattern is within a step-distance of a portion
5 of said patterned layer, a variance in said test pattern being
6 indicative of a variance in said patterned layer.

2. The reticle as recited in Claim 1 wherein said portion of
2 said test pattern is a first portion of said test pattern and said
3 portion of said patterned layer is a first portion of said
4 patterned layer and wherein said first portion of said test pattern
5 is within a step-distance of said first portion of said patterned
6 layer and a second portion of said test pattern is within a step-
7 distance of a second portion of said patterned layer, a variance
8 between said first and second portions of said test pattern being
9 indicative of a variance between said first and second portions of
10 said patterned layer.

3. The reticle as recited in Claim 1 wherein said test
2 pattern includes a reoccurring line/space structure.

4. The reticle as recited in Claim 3 wherein said

2 reoccurring line/space structure has a pitch of less than about $3/2$
3 the wavelength in use.

5. The reticle as recited in Claim 1 wherein said test
2 pattern has a length greater than said step-distance.

6. The reticle as recited in Claim 1 wherein said test
2 pattern is located inside a pellicle frame of said reticle.

7. The reticle as recited in Claim 1 wherein said test
2 pattern is located in a scribe region defined by said patterned
3 layer.

8. The reticle as recited in Claim 1 wherein said variance
2 is a systematic variance in critical dimension (CD) in said
3 patterned layer.

9. A method for monitoring critical dimension (CD) variations of a reticle, comprising:

providing a reticle, said reticle including;

a patterned layer located over a reticle substrate; and

a test pattern located over said reticle substrate,

wherein a portion of said test pattern is within a step-distance of a portion of said patterned layer, a variance in said test pattern being indicative of a variance in said patterned layer;

patterning a material using said reticle; and

visually inspecting said material for light and dark regions, said light and dark regions representing said variance in said patterned layer.

10. The method as recited in Claim 9 wherein said portion of said test pattern is a first portion of said test pattern and said portion of said patterned layer is a first portion of said patterned layer and wherein said first portion of said test pattern is within a step-distance of said first portion of said patterned layer and a second portion of said test pattern is within a step-distance of a second portion of said patterned layer, a variance between said first and second portions of said test pattern being indicative of a variance between said first and second portions of said patterned layer.

11. The method as recited in Claim 9 wherein said test
2 pattern creates a reflective grating in said patterned material,
3 and said reflective grating is configured to provide said light and
4 dark regions if said variance in said patterned layer exists.

12. The method as recited in Claim 11 wherein said reflective
2 grating includes a reoccurring line/space structure.

13. The method as recited in Claim 12 wherein said
2 reoccurring line/space structure has a pitch of less than about $3/2$
3 the wavelength in use.

14. The method as recited in Claim 9 wherein said test
2 pattern is located in a scribe region defined by said patterned
3 layer.

15. The method as recited in Claim 9 wherein said variance is
2 a systematic variance in critical dimension (CD) in said patterned
3 layer.

16. The method as recited in Claim 9 wherein visually
2 inspecting said material includes visually inspecting said material
3 using an optical microscope.

17. The method as recited in Claim 16, further including
2 changing a focus on said optical microscope to cause said light and
3 dark regions to become more or less pronounced.

18. A method for making a semiconductor device, comprising:

2 patterning a resist material using a reticle, wherein said

3 reticle includes;

4 a patterned layer located over a reticle substrate; and

5 a test pattern located over said reticle substrate,

6 wherein a portion of said test pattern is within a step-distance of

7 a portion of said patterned layer, a variance in said test pattern

8 being indicative of a variance in said patterned layer; and

9 using said patterned resist material to form a feature of a

10 semiconductor device.

19. The method as recited in Claim 18 further including

2 visually inspecting said patterned resist material for light and

3 dark regions prior to said using said patterned resist material,

4 said light and dark regions representing a systematic variance in

5 critical dimension (CD) in said patterned resist material.

20. The method as recited in Claim 18 wherein said patterned

2 resist material is used to form multiple features, and wherein said

3 multiple features are electrically contacted to form an operational

4 integrated circuit.